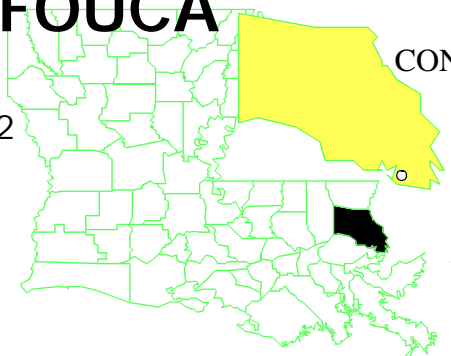


BAYOU BONFOUCA

LOUISIANA

EPA ID# LAD980745632



EPA REGION 6

CONGRESSIONAL DISTRICT 01

St. Tammany Parish

Slidell

No scheduled update.

Site Description

- Location:** ! The Bayou Bonfouca Superfund site is located in Slidell, Louisiana on the north shore of Lake Ponchartrain and includes the former American Creosote Works Plant and a portion of scenic Bayou Bonfouca.
- ! The site is south of West Hall Avenue in Slidell and north of and adjacent to Bayou Bonfouca (See Site Map).
- Population:** ! Approximately 26,000 residents live in the surrounding community.
- Setting:** ! The site was used for commercial operations involving the treatment of wood products with creosote since the late 1800s.
- ! The site encompasses more than 54 acres and associated Bayou sediments.
- ! There were eight highly contaminated creosote areas at the site.
- ! The northern half of the site is heavily wooded.
- ! The site is bordered on the east by a drainage ditch, on the west by a creek, and on the south by Bayou Bonfouca.
- ! Site-related contaminants have been found in the bayou.
- ! Nearest residence potentially impacted by the site is approximately 400 feet from the site, across the bayou to the southwest.
- ! Nearest drinking water well is approximately 1/4 mile northeast of the site.
- Hydrology:** ! Seven stratigraphic layers were encountered in the first 60 feet during the Remedial Investigation of the site. (Interbedded sands, clays, and silts)
- ! Three ground water systems were encountered at the site, including a surficial aquifer, a shallow artisan aquifer at 30 feet, and a deep artisan aquifer at 60 ft.
- ! The elevation of the 100-year floodplain is 9 feet mean sea level (MSL). Most of the site would be inundated by a flood of this elevation.

Present Status and Issues

- ! The State took over Operation and Maintenance (O&M) activities at the site on July 11, 2001.
- ! In an effort to more accurately determine the effectiveness of the groundwater containment system, EPA has initiated a plan to install an additional 5 monitoring wells on and off site to monitor any movement of the creosote plume. Installation of these wells will be conducted beginning the week of August 26th, 2002. Once installed, the State will take responsibility for monitoring these wells.

Wastes and Volumes

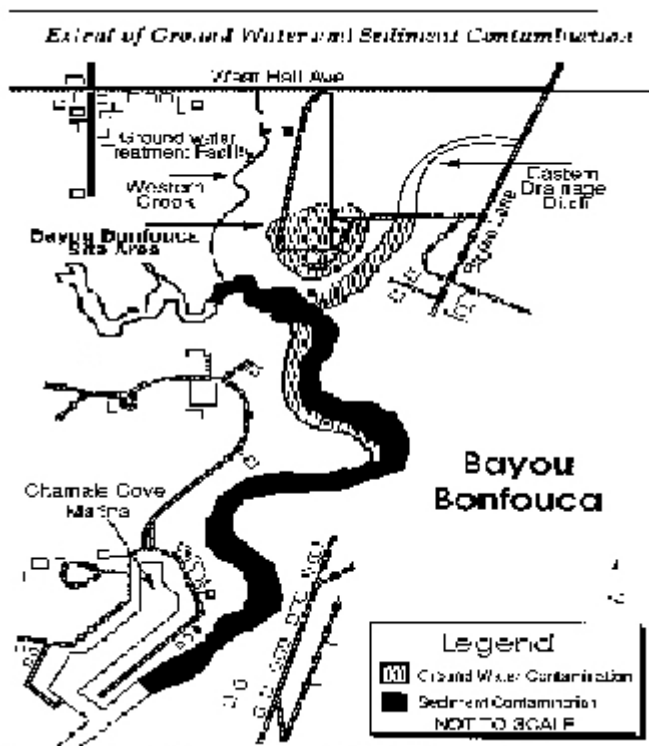
- ! The principal pollutants at the Bayou Bonfouca Superfund site are creosote compounds, or Polynuclear Aromatic Hydrocarbons (PAHs)

Site Assessment and Ranking

NPL LISTING HISTORY

Site HRS Score: 29.78
Proposed Date: 12/30/82
Final Date: 9/08/83
NPL Update: Original

Site Map and Diagram



The Remediation Process

Site History:

- ! A creosote plant began operating at the site about 1892.
- ! Over the years, the plant operated under several owners, including Gulf States Creosoting, American Creosote, and American Creosote Works, with property ownership resting finally with the Braselman Corporation.
- ! Numerous releases of creosote occurred during the years of operation.

! July - August 1985, the Potentially Responsible Party (PRP), under an EPA Administrative Order, fenced the site.

Source Control Remedy

- ! Incineration operations began in November 1993 and were completed on July 28, 1995, 18 months ahead of schedule due to performance based contracting methods and the cooperative relationship among EPA, the Citizens of Slidell, the Corps of Engineers, and the incineration Contractor(IT-OHM).
- ! Demobilization of the incinerator was completed in December 1996, after completion of Southern Shipbuilding Superfund Site (a nearby Superfund site) waste treatment.
- ! A Preliminary Closeout Report was issued for the Source Control Remedial Action (sediment excavation and incineration) on September 30, 1997.

Groundwater Remedy

- ! Ground water pumping and treatment began in June 1991 and has reduced the volume of contamination and prevented further migration.
- ! Approximately 17,600,000 gallons of contaminated ground water has been extracted and treated with approximately 44,500 gallons of creosote oil recovered.
- ! A statutory 5 Year Review of groundwater cleanup activity was completed in September 1996, which recommended continued ground water recovery and treatment and an evaluation of treatment system performance.
- ! In September 1997, EPA completed a Performance Evaluation Report for the groundwater extraction and treatment system. The report indicated that modifications to the current groundwater recovery and treatment system are needed to protect the integrity of the Source Control remedy.
- ! Long Term Remedial Action for groundwater contamination will continue to be administered by EPA through July, 2001.
- ! Additional ground water remedial activity began January 17, 2000, and included installation of additional groundwater recovery wells along Bayou Bonfouca.
- ! The two new arrays were brought online in May 2000.
- ! The second Five-year Review was signed on July 10, 2001.
- ! LDEQ has awarded the Operations and Maintenance (O&M) contract. The State took over O&M activities on July 11, 2001.

Health Considerations:

- ! Approximately 1.5 miles of scenic Bayou Bonfouca were biologically sterile due to severe creosote contamination in bayou sediments and in the water column.
- ! Creosote contamination was so concentrated that it caused 2nd degree chemical burns to divers, injured or killed aquatic animals and waterfowl, and posed a significant hazard to recreational users.

Record of Decision

Signed: March 31, 1987
Incorporated the Source Control ROD of August 15, 1985

- ! The Bayou Bonfouca Superfund site remedy included:
 - " Dredging of Bayou Bonfouca contaminated sediments
 - " Onsite incineration of contaminated soils and sediments
 - " Extraction and treatment of contaminated ground water
- ! Explanation of Significant Differences released February 5, 1990 showed significantly greater waste volumes than previous estimates resulting in remedy selection of onsite incineration of wastes after careful examination of biotreatment, underwater capping, and other alternatives.
- ! Estimated Cost: \$140 Million Dollars

Community Involvement ---

- ! Community Involvement Plan: Developed 04/84, revised 08/85
- ! Open houses and workshops: 04/85, 06/86, 9/6/89, 7/12/90, 12/5/90, 6/26/91, 11/11/92, 12/8/93, 1/13/93, 3/3/93, 5/19/93, 7/21/93, 9/93, 11/93, 4/94, 6/94, 8/94, 12/94, 2/95, 1/96
- ! Original Proposed Plan Fact Sheet and Public Meeting: 02/87
- ! Original ROD Fact Sheet: 07/87; Explanation of Significant Difference (ESD): 1/90
- ! Milestone Fact Sheets: Update 03/88, 08/89, 06/90, 12/90 ESD decision 1/90, 1/93, 9/93, 11/93, 2/94, 5/94, 7/94, 9/95, 10/00, 07/01
- ! Citizens on site mailing list: 318
- ! Constituency Interest: High interest at site. Some nearby residents strongly opposed the on site landfill. Many residents strongly supportive of EPA efforts.
- ! Site Repository: St. Tammany Parish Library, Slidell Branch, Slidell, Louisiana
- ! Commemorative Activities: 6/91 - Ground Water Treatment Plant Completion; 9/95 - Source Control Construction Completion

Technical Assistance Grant ---

- ! Availability Notice: 02/89, 5/94, 6/94
- ! Letters of Intent Received:
 - 1) 5/94 - Slidell Working Against Major Pollution (SWAMP)
 - 2) 9/94 - Earth Beautiful Foundation
- ! Final Application Received: 12/94
- ! Grant Award: 12/22/94, 12/22/97 to SWAMP
- ! Technical Advisors Selected: 4/20/95 (Wilma Subra & Joel Hirschhorn)
- ! Current Status: TAG was closed and \$21,363 deobligated on 11/29/00.

Contacts ---

- ! **Remedial Project Manager:** Mike McAteer (EPA) 214-665-7157, Mail Code: 6SF-LP
- ! **State Contact:** Rich Johnson (LDEQ) 225-765-0487
- ! **Community Involvement:** Mike McAteer (EPA) 214-665-7157, Mail Code: 6SF-LP
- ! **Attorney:** James L. Turner (EPA) 214-665-3159, Mail Code: 6RC-S
- ! **Prime Contractor:** U.S. Army Corps of Engineers/IT Corporation and OHM Corporation
- ! **EPA Ombudsman:** Arnold Ondarza, 1-800-533-3508

Enforcement

- ! State of Louisiana and the United States of America v. Braselman Corp. et al., C.A. No. 96-0862 C/W 96-0872, E.D.La.; Filed March 11, 1996, for cost recovery under section 107 of CERCLA. Case is active.
- ! Consent Decree (in Braselman Corp. case); Kerr-McGee Corporation and Kerr-McGee Chemical Corporation. Entered June 25, 1997. Settlement terms: U.S., \$20 Million; Louisiana, \$1.5 Million.
- ! Consent Decree (in Braselman Corp. case); Fleming American Investment Trust, plc. Entered July 31, 1997. Settlement terms: U.S., \$3.6 Million; Louisiana, \$400,000.
- ! Join Motion to Dismiss (in Braselman Corp. case); Union Camp Corporation. Granted Nov. 30, 1998. Entered Dec. 1, 1998.
- ! Consent Decree (in Braselman Corp. case): The Alabama Great Southern Railroad Company. Entered Sept. 15, 1999. U.S. \$11.7 Million; Louisiana \$1.3 Million.

Environmental and Economic Benefits

- ! EPA's remedial action has detoxified over 170,000 cubic yards of contaminated sediment, and treated massive amounts of contaminated ground water. A mile and a half of the Bayou has been restored for aquatic life, as well as human recreational and residential use. A public boat launch was recently installed by the City to allow public access to this beautifully restored area.
- ! The Site property and buildings were donated to the City of Slidell by Brasselman Corporation and EPA for future use by the city as a city maintenance yard, sewage control facility during flood events, and possibly as a park. The keys to the property were transferred to the City in January, 1997.
- ! Approximately \$12 Million dollars were spent by EPA contractors for subcontracting services within St. Tammany Parish.
- ! Between 80 and 90% of field and office staff were locally hired, trained, and employed by EPA Contractors or sub-contractors.

